

## Juggling Jobs and Kids: The Impact of Employment Schedules on Fathers' Caring for Children

*This article examines how the temporal structure of employment schedules influences paternal responsibility for child care. Data on 1,452 families from the National Child Care Survey 1990 show mixed support for the demand/response capacity hypothesis, which states that paternal participation in child care is a function of demands placed on fathers as well as their capacity to respond to these demands. The present study finds that multiple dimensions of the mother's employment schedule exert pressures on the likelihood of a father taking care of his youngest child when the mother is not available. Yet only one aspect of the father's employment schedule—time of day—affects his capacity to respond to child care demands. Although the nature of the relationship between employment schedules and fathers' child care generally depends on the age of the child, fathers are consistently most likely to take care of their youngest child when they work different hours than their wives.*

Gender equality in the future depends partly on how women and men combine employment and family responsibilities in the present. The deci-

sions that mothers and fathers make about work and family, especially about how they care for their children, help shape children's cognitive maps, social behavior, and personal expectations. Parents, in everything they do, from the jobs they choose to the way they allocate household chores, provide powerful models of female and male behavior for their children. Although the traditional arrangement of a father working outside the home and a mother staying home full-time is less typical of families today than it was 25 years ago, women are still the principal childrearsers and men are the major breadwinners (Hochschild, 1989). Thus, parents, inadvertently or intentionally, prepare their children for similar future roles in the economy and the family by reinforcing gender traits such as independence in boys and mothering in girls (Chodorow, 1978; Gilligan, 1982). Several scholars claim that only when fathers fully share childrearing and caregiving with mothers will the cycle of gender inequality be broken (Chodorow, 1978; Gilligan, 1982).

The potential effects of fathering on the gender role conceptions of daughters and sons and on gender inequality are not the only reasons for encouraging men's participation in child care. Gender differences in parenting styles appear to have substantial effects on the socialization and well-being of children (Pruett, 1993; Starrels, 1994); fathers' involvement in childrearing is related to better outcomes for their children in terms of academic achievement, social competence, and self-esteem (see Russell & Radin, 1983). Like-

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wise, mothers benefit from men's participation in raising children; fathers who take a major responsibility for child care ease the burden of the "second shift" for employed mothers, and they reduce maternal "stress from work overload, anxiety about adequate childcare and supervision, and a shortage of time for rest and leisure" (Hoffman, 1983, p. 174). Fathers who are actively involved in caring for their children may enjoy the positive effects of multiple roles, closer father-child bonds, and enhanced husband-wife relationships (Russell & Radin, 1983). Men, like women, who combine different life roles, such as worker, parent, and spouse, may be better off emotionally than are those with fewer life roles (Crosby, 1991).

Although most fathers in the United States avoid primary responsibility for child care, many fathers do take care of their children on a regular basis. In fact, nearly 3 million children of employed mothers, currently married and otherwise, were cared for primarily by their fathers in 1988 (U.S. Bureau of the Census, 1992). Nevertheless, the proportion of children principally cared for by their father has remained relatively stable since the 1970s; among children of dual-earning married couples, 16.8% of preschool-age children and 8.7% of children aged 5 to 14 relied on their father as their primary caregiver in 1988 (U.S. Bureau of the Census, 1992).

What prevents more fathers from taking greater responsibility for child care on a regular basis? Contrary to popular belief, it is not a lack of paternal desire or ideological commitment alone. Some researchers speculate that many fathers would increase their involvement with children if the time demands of their jobs were reduced (Barnett & Baruch, 1988). Although the number of hours a father spends in paid work may negatively affect his domestic responsibilities (Coverman, 1985; Davis & Sanik, 1991), the mere amount of job time in and of itself does not explain why some fathers do and others do not care for their children. The scheduling of paid work—when and how often a father works in terms of whether the hours are regular or rotating, on weekdays or weekends, and during the day or night—provides a more useful framework for understanding the relationship between employment and child care (see Nock & Kingston, 1988; Pleck & Staines, 1985; Presser, 1989; Staines & Pleck, 1983).

This article explores how the scheduling of mothers' and fathers' jobs facilitates (or discourages) fathers' caring for their children. It uses data from the National Child Care Survey 1990

(Hofferth, Brayfield, Deich, & Holcomb, 1991), the most recent national data source on child care and parental employment. The present study goes beyond previous research by estimating the separate effects of mothers' and fathers' schedules on fathers' child care within a multitemporal framework, and, in doing so, it contributes to our understanding of the complexity of juggling work and family roles.

## PREVIOUS RESEARCH

### *Explaining Men's Lack of Responsibility for Child Care*

Past research has identified several factors that may constrain a father's participation in the day-to-day care of his children: (a) conventional values, beliefs, and normative expectations about the division of household labor (e.g., Hochschild, 1989; Ross, 1987), (b) men's greater socioeconomic resources and power (Brayfield, 1992), (c) economic efficiency for the family unit (Becker, 1974), and (d) demands placed on fathers and their capacity to respond to those demands (Coverman, 1985).

This last explanation—the demand/response capacity approach—provides a valuable foundation for understanding the relationship between the temporal structure of employment schedules and the father's role in child care. The basic perspective, as articulated by Coverman (1985), suggests that men will take on child care responsibilities only to the extent that there are demands placed on them to do so and that they have the capacity to respond to these demands. Coverman's (1985) research supported this hypothesis. She found that (a) wives' paid work outside the home and the presence of children pressure husbands to spend more time on child care and other domestic tasks and (b) the hours a husband spends at his own job limit the available time he can allocate to family work.

Yet Coverman conceptualized both demands and response capacities narrowly. I contend that the scheduling of women's market work in combination with their attitudes, their socioeconomic resources, stage in the life course, and other circumstances also operate as demands on paternal responsibility for child care. Likewise, men's employment schedules, attitudes, and labor market resources influence their capacity to respond to (or resist) these demands. Thus, I view the other aforementioned theoretical explanations—gender

role ideology, relative resources, and economic efficiency—as complementary to a demand/response capacity framework. For example, women who reject a traditional image of fatherhood, one that emphasizes men's breadwinning duties (provider/instrumental role) and discourages nurturing behavior (homemaker/expressive role), probably place greater demands on men to take care of their children. But, at the same time, men who subscribe to a traditional image of fatherhood probably are more likely to resist such demands because their ideological stance limits their capacity to respond. Likewise, women with more resources than their partner are in a more powerful position to demand greater paternal responsibility for child care. As a consequence, women who make successful demands on their partner may balance (or juggle) their employment and family roles more effectively than other women.

In fact, although Coverman (1985) did not explicitly make the connection, the demand/response capacity framework fits into the theoretical genre that deals with issues of role combination, role strain, and role conflict. Under this rubric of ideas, a central assumption is that each role (e.g., worker, spouse, parent) is "greedy" for time and commitment (Coser, 1974). Accordingly, the scheduling of men's employment may impinge upon their capacity to perform family roles. Yet, at the same time, the scheduling of women's employment may require their partners to play a greater role in family work. Thus, men's responsibility for child care (and their capacity to combine multiple roles) may be governed by the temporal structure of the competing demands of husbands' and wives' employment schedules.

#### *Empirical Links Between Employment Schedules and Child Care*

Prior research has documented pieces of the relationship between employment schedules and child care arrangements (see Hofferth et al., 1991, and U.S. Bureau of the Census, 1992, for data on all forms of child care). Several studies have shown how fathers' child care, in particular, varies dramatically with the employment schedule of the mother (Barnett & Baruch, 1987, 1988; Nock & Kingston, 1988; Pleck & Staines, 1985; Presser, 1986, 1988, 1989). Fathers are more likely to be responsible for child care when their wives are employed part-time rather than full-time (Barnett & Baruch, 1987, 1988; Presser, 1986, 1988, 1989) and when their wives work

non-day shifts (Nock & Kingston, 1988; Presser, 1986, 1988, 1989; U.S. Bureau of the Census, 1992). On the other hand, if a wife works a variable or rotating schedule, it discourages her husband from spending time on child care (Pleck & Staines, 1985).

A father's employment schedule also influences his participation in child care (Davis & Sanik, 1991; Nock & Kingston, 1988; Pleck & Staines, 1985; Staines & Pleck, 1983). While there is some question as to whether the amount of time fathers spend in paid work influences their child care responsibilities (see Barnett & Baruch, 1987; Coverman, 1985; Davis & Sanik, 1991; Staines & Pleck, 1983), fathers who work weekends or non-day shifts spend less time taking care of their children (Nock & Kingston, 1988; Pleck & Staines, 1985; Staines & Pleck, 1983).

Lastly, the prevalence of fathers' child care relates to the intersection of mothers' and fathers' employment schedules (Presser, 1989; Presser & Cain, 1983; U.S. Bureau of the Census, 1992). Children are less likely to be cared for by their fathers if both parents work the day shift than if both parents work evenings or nights (U.S. Bureau of the Census, 1992). Among couples working different shifts, a father is more likely to care for his children when he works days and his wife works non-days than the other way around—that is, if a father works non-days and his wife works days (U.S. Bureau of the Census, 1992). For some couples, the lack of fit between the wife's and husband's employment schedules generates the phenomenon known as "split-shift parenting," thereby increasing paternal involvement in child care (Presser, 1989; Presser & Cain, 1983).

Most researchers have examined how only one or two facets of mothers' and/or fathers' employment schedules influence fathers' child care. Some studies have focused exclusively on dimensions of maternal employment (Presser, 1986, 1988) or on dimensions of paternal employment (Davis & Sanik, 1991). Several studies on fathers' child care have included aspects of both mothers' and fathers' employment schedules (Barnett & Baruch, 1987; Marsiglio, 1993; Nock & Kingston, 1988; Pleck & Staines, 1985; Presser & Cain, 1983). Yet no previous study on fathers' child care has incorporated all of the following structural features of employment schedules: number of hours, variability of hours, days of the week, and time of day worked across all jobs of both wife and husband, as well as the intersection of employment timing for the couple. Also, past

research has targeted couples with infants or preschool-age children only. The present study fills these voids.

#### KEY HYPOTHESES

This study broadens the demand/response capacity perspective, focusing on how the pressures and constraints of employment schedules affect paternal responsibility for child care. I test the hypothesis that demands on fathers to perform child care tasks (represented here by the scheduling of their wives' employment) and their capacity to respond to these demands (defined by their own employment schedules) simultaneously determine their responsibility for child care. Based on this general hypothesis, then, demands should be greatest when mothers work many hours, evenings, nights, or weekends on a nonrotating basis. Yet if mothers are employed full-time, they may be less likely to rely on fathers and more likely to rely on formal child care arrangements. Father's time availability may outweigh the demands of full-time maternal employment, or mothers may be hesitant to leave children in the care of fathers for longer periods of time on a daily basis. Fathers should be more likely to take care of their children when they work different hours than their wives, not only because they are theoretically available but because care provided by the father is less costly than alternative arrangements. Thus, fathers should be more likely to participate in child care when they work fewer hours, weekdays, and daytime shifts on a nonrotating schedule.

Although some wives adjust their own schedule to coordinate child care with their husbands (Hertz & Charlton, 1989; Presser, 1988), most mothers have little choice in scheduling their time in paid work (Presser, 1989; Simon 1990; U.S. Bureau of the Census, 1992). Nevertheless, mothers are more likely than fathers to cite child care as the main reason for working a particular shift (Presser, 1989). Thus, I hypothesize that the scheduling of women's jobs (demands on husbands' time) affects men's child care responsibilities to a greater extent than men's own employment schedules (their response capacity).

#### METHODOLOGY

##### *Data and Sample Description*

The data for this study come from the National Child Care Survey 1990 (NCCS), a nationally

representative survey of 4,392 households with children under age 13, which was conducted between November 1989 and May 1990 (Hofferth et al., 1991). This survey collected information on child care arrangements, expenditures, and histories, and on respondent's and partner's current and previous employment. In addition, respondents were asked to complete employment and child care time diaries for the week preceding the interview by listing the beginning and ending times for each job and for each regular child care arrangement. About 46% of the surveyed households consisted of dual-earning couples with children, and 1,703 of these households completed the time diaries.

I analyze dual-earning couples with a preschool-age child separately from those whose youngest child is of school age because the care arrangements parents use for younger children are significantly different than those for older children (Hofferth et al., 1991; U.S. Bureau of the Census, 1992). Also, I use standardized sample weights to adjust for differential probabilities of sample selection and nonresponse (see Hofferth et al., 1991, for details). Thus, after listwise deletion of missing values and weighting, the analytic sample consists of 699 families with the youngest child under age 5 (of which 634 completed time diaries) and 753 families with the youngest child aged 5 to 12 (of which 493 completed time diaries).

#### *Measures*

**Father care.** This study examines factors that account for whether or not a father cares for his youngest child under three temporal conditions: (a) at any time at all during the week on a regular basis when the mother is not at home for whatever reason and regardless of the particular hours of care, (b) during some portion of time during the specific hours when the mother is employed, and (c) as the primary caregiver—that is, the care arrangement for the greatest number of hours when the mother is at her job. These three dependent variables do not measure the quality, content, or duration of care, but simply whether or not a father is listed as the caregiver. The form of paternal involvement is not available in this data set.

Primary arrangement refers to the type of care used for the greatest number of hours in the week preceding the interview, according to the time diary. Because all school-age children presumably are enrolled in school, I examine only their nonschool care arrangements. Thus, if school was

listed as a child's primary arrangement, I substituted the secondary arrangement in its place.

I estimated the likelihood of fathers' child care (coded as 1) compared with other care (coded as 0) for each temporal condition, using logistic regression. Although the resulting parameter estimates (log odds coefficients) indicate direction of effect, the interpretation of the magnitude of these coefficients is not very intuitive. So I also derived predicted probabilities of fathers' child care by evaluating the logistic equations for different employment schedules, holding all other variables in the model constant at their respective means.

**Employment schedules.** I characterized the variety of employment schedules according to five dimensions: number of hours, variability of hours (fixed versus rotating), days of the week, time of day, and number of nonoverlapping hours per week. Since almost 14% of the dual-earning couples in this sample have at least one partner working two or more jobs, I used time diary information across all jobs. With the exception of Presser (1988), researchers typically have used data on the principal job only. For any mother or father

who had at least one job with rotating hours, I coded the schedule as rotating, even if the principal job had fixed hours.

The Appendix describes the measurement of mothers', fathers', and couples' work scheduling variables. The most complex schedule variable is the number of nonoverlapping hours per week, a variable introduced by Presser and Cain (1983). In the present study, the term *nonoverlapping* refers specifically to the time period for which the mother is employed, but the father is not. A value of 40 nonoverlapping hours implies that wife and husband work completely different shifts; a value of zero implies that they work the same shift. This variable serves as an indicator of father's availability—one component of his response capacity—for providing care when maternal care is not possible.

**Other relevant factors.** Fathers face pressures to care for their children from sources other than characteristics of wives' employment. Although these other ingredients are not the focus of this study, I control for a variety of other potential demand and response factors that may encourage fa-

TABLE 1. DESCRIPTIVE STATISTICS FOR INDEPENDENT VARIABLES BY AGE OF YOUNGEST CHILD

|                               | Under Age 5        |           | Aged 5 to 12       |           |
|-------------------------------|--------------------|-----------|--------------------|-----------|
|                               | Mean or Percentage | SD        | Mean or Percentage | SD        |
| Mother's schedule             |                    |           |                    |           |
| Hours per week                | 33.66              | 13.23     | 33.34              | 11.67     |
| Missing hours                 | 3%                 | —         | 4%                 | —         |
| Rotating schedule             | 23%                | —         | 27%                | —         |
| Weekends                      | 23%                | —         | 15%                | —         |
| Non-day shift                 | 16%                | —         | 8%                 | —         |
| Father's schedule             |                    |           |                    |           |
| Hours per week                | 43.62              | 9.70      | 43.25              | 8.62      |
| Missing hours                 | 7%                 | —         | 9%                 | —         |
| Rotating schedule             | 28%                | —         | 29%                | —         |
| Weekends                      | 26%                | —         | 22%                | —         |
| Non-day shift                 | 14%                | —         | 11%                | —         |
| Couple's schedule             |                    |           |                    |           |
| Nonoverlapping hours per week | 11.03              | 13.38     | 8.56               | 12.30     |
| Control variables             |                    |           |                    |           |
| Age of youngest child         | 1.86               | 1.40      | 8.06               | 2.21      |
| One sibling (none omitted)    | 38%                | —         | 50%                | —         |
| Two or more siblings          | 23%                | —         | 26%                | —         |
| Black (White omitted)         | 9%                 | —         | 8%                 | —         |
| Hispanic                      | 8%                 | —         | 7%                 | —         |
| Age of mother                 | 30.73              | 5.07      | 36.78              | 5.34      |
| Education of mother           | 13.70              | 2.13      | 13.80              | 2.13      |
| Mother's annual earnings      | 14,688.46          | 11,584.09 | 16,205.56          | 12,759.22 |
| Missing mother's earnings     | 15%                | —         | 17%                | —         |
| Father's annual earnings      | 28,132.73          | 14,749.73 | 31,458.55          | 17,876.30 |
| Missing father's earnings     | 20%                | —         | 26%                | —         |
| Number of families            | 699                |           | 753                |           |

ther's participation in child care: age of youngest child, number of other children in the family, race, age, and education of the mother, and the annual earnings of mother and father separately (see Appendix). Unfortunately, information about gender role orientation is not available in this data set.

## RESULTS

### *The Diversity of Employment Schedules Among Dual-Earning Couples*

The univariate data on the employment schedules of dual-earning couples shows that mothers are employed fewer hours per week, on average, than fathers, regardless of the age of their youngest

child (Table 1). This result approximates prior estimates based on 1985 Current Population Survey (CPS) data (Smith, 1986; Presser, 1989). The NCCS data also reveal that the majority of mothers and fathers work fixed hours each week. Nevertheless, a substantial proportion of dual-earner couples have one partner with rotating hours that vary from week to week or from days to evenings or nights (see Table 1). Not surprisingly, both mothers and fathers are less likely to work during the weekend than they are to work Monday through Friday only. The percentage of mothers and fathers working weekends in this study closely approximates Presser's (1989) findings. Moreover, the vast majority of mothers and fathers work day shifts. However, parents, especially

TABLE 2. LOGISTIC REGRESSION MODELS PREDICTING FATHER CARE BY AGE OF YOUNGEST CHILD

|                               | Under Age 5           |                         |                           | Aged 5 to 12          |                         |                           |
|-------------------------------|-----------------------|-------------------------|---------------------------|-----------------------|-------------------------|---------------------------|
|                               | Any Time <sup>a</sup> | Mom at Job <sup>b</sup> | Primary Care <sup>c</sup> | Any Time <sup>a</sup> | Mom at Job <sup>b</sup> | Primary Care <sup>c</sup> |
| Overall sample mean           | .62                   | .36                     | .18                       | .51                   | .30                     | .24                       |
| Overall predicted value       | .64                   | .32                     | .06                       | .50                   | .27                     | .20                       |
| Mother's schedule             |                       |                         |                           |                       |                         |                           |
| Hours per week                | -.00                  | -.04***                 | -.10***                   | .00                   | -.04**                  | -.04**                    |
| Missing hours                 | -.06                  | -.08                    | -.35                      | .16                   | 1.05                    | 1.27                      |
| Rotating schedule             | .14                   | .00                     | -.18                      | .14                   | .20                     | -.03                      |
| Weekends                      | .75***                | 1.30***                 | .65*                      | -.21                  | .00                     | .03                       |
| Non-day shift                 | 1.24***               | .87**                   | 2.03***                   | .51                   | .29                     | .84                       |
| Father's schedule             |                       |                         |                           |                       |                         |                           |
| Hours per week                | -.01                  | -.00                    | .02                       | -.02*                 | .00                     | -.00                      |
| Missing hours                 | -.13                  | .30                     | .43                       | -.03                  | -.29                    | -.09                      |
| Rotating schedule             | .05                   | .03                     | .07                       | .20                   | .21                     | .04                       |
| Weekends                      | -.34                  | -.40                    | -.11                      | -.13                  | -.53                    | -.60                      |
| Non-day shift                 | .15                   | -.08                    | .91*                      | -.12                  | -1.33**                 | -1.22*                    |
| Couple's schedule             |                       |                         |                           |                       |                         |                           |
| Nonoverlapping hours per week | .01                   | .07***                  | .10***                    | -.03***               | .08***                  | .07***                    |
| Control variables             |                       |                         |                           |                       |                         |                           |
| Age of youngest child         | -.01                  | -.01                    | .02                       | -.08*                 | .01                     | .03                       |
| One sibling (none omitted)    | -.06                  | -.12                    | .05                       | -.43*                 | .36                     | .57                       |
| Two or more siblings          | .25                   | -.22                    | -.26                      | -.51*                 | .21                     | .36                       |
| Black (White omitted)         | .32                   | -.42                    | -1.28*                    | .57                   | -.32                    | -.25                      |
| Hispanic                      | -.46                  | -.44                    | -.90                      | -.10                  | -1.19*                  | -1.53*                    |
| Age of mother                 | -.04*                 | .03                     | .01                       | -.00                  | -.03                    | -.03                      |
| Education of mother           | -.04                  | -.10                    | -.09                      | -.02                  | .02                     | -.10                      |
| Mother's annual earnings      | .07                   | -.09                    | -.06                      | .05                   | .22                     | .12                       |
| Missing mother's earnings     | -.10                  | .03                     | .54                       | -.13                  | -.24                    | -.04                      |
| Father's annual earnings      | -.01                  | -.06                    | -.02                      | .03                   | .05                     | .12                       |
| Missing father's earnings     | -.28                  | -.22                    | .13                       | .20                   | .02                     | .11                       |
| Intercept                     | 2.00                  | 2.02                    | -.15                      | 1.36                  | -2.20                   | -.75                      |
| Model chi-square              | 89.81***              | 246.61***               | 312.60***                 | 67.34***              | 91.91***                | 88.01***                  |
| Number of families            | 699                   | 634                     | 634                       | 753                   | 493                     | 493                       |

Note: Standard errors available from the author upon request.

<sup>a</sup>Father as caregiver at any time on a regular weekly basis when mother is unavailable.

<sup>b</sup>Father as caregiver during some portion of time when mother is at her job.

<sup>c</sup>Father as primary caregiver when mother is at her job.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

mothers, with young children are more likely to work non-day shifts than those with older children. Note that the NCCS percentages are not directly comparable to 1985 CPS data (Mellor, 1986; Presser, 1989) because of differences in measurement. Mellor (1986) did not separate mothers and fathers from all married women and men, and Presser (1989) combined shift work and rotating hours into a single variable (fixed day, fixed non-day, and rotating).

Finally, the NCCS data suggest that fathers are available for child care (i.e., not engaged in paid work) for an average of 9 to 11 hours per week during the time when the mother is at her job (see Table 1). However, a higher proportion of fathers with a preschool-age child are available for some time when the mother is at her job (71%), compared with fathers with older children (60%; data not shown). These estimates are somewhat lower than that of Presser (1989). Once again, differences may be partly due to alternative measurement strategies.

#### *Determinants of Paternal Participation in Child Care*

Many fathers provide care for their youngest child on a regular basis (i.e., for some portion of time during the week when the mother is not available). Generally, fathers are more likely to take care of their youngest child when the child is under age 5 than when she or he is of school age both at any time—62% versus 51% (see Table 2, Columns 1 and 4)—and when mom is at her job—36% versus 30% (Table 2, Columns 2 and 5). A notable exception is under the third temporal condition: primary caregiver (i.e., providing care for the greatest number of hours when the mother is at her job). A larger proportion of fathers are primary caregivers for school-age children (24%) than for preschool-age children (18%). Timewise, it may be easier for fathers to be primary caregivers for older children, who require fewer hours of care outside of school.

*Net effects of mother's schedule.* Several dimensions of a mother's employment schedule are associated with paternal participation in child care for families with young children. Yet only one aspect of a mother's schedule—number of hours—is statistically significant for families whose youngest child is of school age (Table 2, Columns 5 and 6). The number of hours a mother is employed negatively affects the likelihood of a fa-

ther taking care of either a preschool-age child or a school-age child when the mother is at her job (for any portion of time or as the primary caregiver; see Table 2). Although this finding is consistent with earlier studies by Presser (1986, 1988), it contradicts the basic demand hypothesis. Instead, it suggests that some demands may be so burdensome that they inhibit rather than facilitate fathers' child care.

On the other hand, maternal employment on weekends and on evenings or nights encourages fathers to take care of their preschool-age children (Table 2, Columns 1–3). For example, the probability that a father will care for his preschooler when his wife is at her job increases from 26% for a wife who works only a Monday through Friday schedule to 57% for a wife who works at least one day during the weekend (see Table 3). And in support of Presser's (1986, 1988) findings, the probability of fathers' child care under any temporal circumstance for preschool-age children varies most dramatically with the time of day that the mother works. For example, there is only a minuscule chance that a father will be the primary caregiver if his wife works a typical day shift (4.6% chance), regardless of his schedule, whereas the probability of a father being the primary caregiver increases to about 27% if his wife works a non-day shift.

Contrary to the demand hypothesis, the days of the week and the time of the day that mothers are employed have no net effects on fathers' child care for school-aged children. Also the fact that mothers may work either fixed or rotating schedules does not alter the probability of fathers' child care for children of all ages and across all three temporal conditions.

*Net effects of father's schedule.* The probability of fathers' child care for each temporal condition varies little by the father's employment schedule compared with the net effects of the mother's employment schedule, regardless of the age of the child. For couples with a preschool-age child, only the time of day that a father works is statistically significant, and it is only for one temporal condition of fathers' child care (Table 2, Column 3). The probability that a father will be the primary caregiver for his youngest preschool-age child is higher if he works evenings or nights (12.5% chance), rather than during the daytime (5.5% chance). This coefficient is counterintuitive because these data also show that the father is more likely to be the primary caregiver for young child-

TABLE 3. NET PREDICTED PROBABILITIES OF FATHER CARE UNDER THREE TEMPORAL CONDITIONS FOR SELECTED EMPLOYMENT SCHEDULES BY AGE OF YOUNGEST CHILD

|                               | Under Age 5           |                         |                           | Aged 5 to 12          |                         |                           |
|-------------------------------|-----------------------|-------------------------|---------------------------|-----------------------|-------------------------|---------------------------|
|                               | Any Time <sup>a</sup> | Mom at Job <sup>b</sup> | Primary Care <sup>c</sup> | Any Time <sup>a</sup> | Mom at Job <sup>b</sup> | Primary Care <sup>c</sup> |
| <i>Mother's schedule</i>      |                       |                         |                           |                       |                         |                           |
| Hours per week                |                       |                         |                           |                       |                         |                           |
| 20 hours                      | — <sup>d</sup>        | .474                    | .209                      | —                     | .423                    | .320                      |
| 40 hours                      |                       | .272                    | .036                      |                       | .238                    | .175                      |
| Weekly schedule               |                       |                         |                           |                       |                         |                           |
| Fixed                         | —                     | —                       | —                         | —                     | —                       | —                         |
| Rotating                      |                       |                         |                           |                       |                         |                           |
| Days of week                  |                       |                         |                           |                       |                         |                           |
| Weekdays only                 | .600                  | .264                    | .054                      | —                     | —                       | —                         |
| Weekends                      | .761                  | .569                    | .098                      |                       |                         |                           |
| Time of day                   |                       |                         |                           |                       |                         |                           |
| Day shift                     | .595                  | .297                    | .046                      | —                     | —                       | —                         |
| Non-day shift                 | .836                  | .501                    | .268                      |                       |                         |                           |
| <i>Father's schedule</i>      |                       |                         |                           |                       |                         |                           |
| Hours per week                |                       |                         |                           |                       |                         |                           |
| 20 hours                      | —                     | —                       | —                         | .645                  | —                       | —                         |
| 40 hours                      |                       |                         |                           | .523                  |                         |                           |
| Weekly schedule               |                       |                         |                           |                       |                         |                           |
| Fixed                         | —                     | —                       | —                         | —                     | —                       | —                         |
| Rotating                      |                       |                         |                           |                       |                         |                           |
| Days of week                  |                       |                         |                           |                       |                         |                           |
| Weekdays only                 | —                     | —                       | —                         | —                     | —                       | —                         |
| Weekends                      |                       |                         |                           |                       |                         |                           |
| Time of day                   |                       |                         |                           |                       |                         |                           |
| Day shift                     | —                     | —                       | .055                      | —                     | .300                    | .221                      |
| Non-day shift                 |                       |                         | .125                      |                       | .102                    | .078                      |
| <i>Couple's schedule</i>      |                       |                         |                           |                       |                         |                           |
| Nonoverlapping hours per week |                       |                         |                           |                       |                         |                           |
| 0 hours                       | —                     | .178                    | .022                      | .437                  | .138                    | .110                      |
| 10 hours                      |                       | .308                    | .056                      | .514                  | .272                    | .120                      |
| 20 hours                      |                       | .479                    | .134                      | .590                  | .465                    | .335                      |
| 30 hours                      |                       | .655                    | .286                      | .662                  | .669                    | .504                      |
| 40 hours                      |                       | .796                    | .510                      | .727                  | .825                    | .672                      |

<sup>a</sup>Father as caregiver at any time on a regular weekly basis when mother is unavailable.

<sup>b</sup>Father as caregiver during some portion of time when mother is at her job.

<sup>c</sup>Father as primary caregiver when mother is at her job.

<sup>d</sup>Net effect is not statistically significant.

dren when the mother works a non-day shift. These findings may be the result of variable definition: evenings, nights, and graveyard shifts are combined into "non-day." These findings, however, do not contradict prior research, which has shown that fathers' child care is least likely when both parents work day shifts (U.S. Bureau of the Census, 1992).

For couples with older children, the probability of fathers' child care varies substantially by only one dimension of the father's employment schedule, but the direction of the effect is reversed from that of couples with younger children. A father is more likely to care for his school-age child if he works a day shift instead of

a non-day shift (Table 2, Column 4). This may have more to do with the timing of the school day than with the father's employment.

*Net effects of couple's joint schedule.* As a father's time availability increases, he is more likely to take care of his youngest child when his wife is at her job, and, more importantly, he is more likely to be the primary caregiver (see Table 2). The basic pattern of probabilities varies little by age of the youngest child (Table 3). For example, among couples with a preschool-age child, if a father is not available during any portion of time when his wife is at her job (i.e., zero nonoverlapping hours), he has about an 18% chance of being

a caregiver. If a father is available for 20 hours a week during the time period when his wife is employed, the probability of caring for his youngest preschool-age child during that time reaches nearly 50%; nevertheless, it is still only a 50/50 chance. Thus, time availability alone does not account for men's participation in child care.

*Other relevant factors.* Few of the control variables achieve statistical significance in any of the models. Among families with a preschool-age child, there is a lower probability of fathers' child care at any time for older mothers than for younger mothers (Table 2, Column 1). This finding supports a cohort/demand perspective in that younger generations of women may place greater ideological demands on husbands to participate in family work than women of older generations. Also, there may be less wage disparity between husbands and wives in younger cohorts. Consequently, younger women may be in a better position to insist on ideological compliance.

The race/ethnicity coefficients are perplexing: Black fathers are less likely than White fathers to be primary caregivers for preschool-age children (Table 2, Column 3), and Hispanic fathers are less likely than White fathers to care for school-age children either as primary caregivers or for any portion of time during the hours of maternal employment (Table 2, Columns 5 and 6). We cannot rule out the possibility that race/ethnicity may be associated with unobserved factors, such as values and beliefs about parenting and fatherhood, nonmonetary resources, urban residence, or the availability of female relatives inside or outside the household. Nevertheless, cultural preferences may play a role in how parents take care of their children. Non-White communities may place fewer demands on fathers to participate directly in the day-to-day supervision of children. Instead, non-White fathers may "care for" their children by providing a secure financial environment.

Finally, among families whose youngest child is of school age, fathers with older children and with larger families are less likely to take care of their children at any time on a regular basis when the mother is not at home (Table 2, Column 4). In these cases, older children may either take care of themselves, or older siblings may substitute for fathers, thereby freeing up men's time for leisure or other activities.

*Evaluation of the empirical models.* The combination of employment schedules and other relevant factors provides somewhat of a good fit for

modeling the probability of fathers' child care under all three temporal conditions for dual-earner couples whose youngest child is of school age, but not for those with a preschool-age child. This model does not fully account for the probability of a father being the primary caregiver for children under age 5. This is evident from an examination of the point estimates; for example, the equation predicting the probability of fathers being primary caregivers more closely approximates the observed proportion of fathers providing such care for school-age children (.20 versus .24) than for preschool-age children (.06 versus .18; see Table 2). This finding suggests that it is easier for fathers with older children to be primary caregivers, given certain employment schedules, than it is for those with preschoolers. This may be due to the scheduling of the school day and the fewer hours of care needed for school-age children. Yet other factors, such as occupation, the availability of workplace benefits, or gender role orientation, may also explain why some fathers are the principal caregivers for their preschoolers and others are not. To play a more active role in child care, fathers with younger children may require greater job supports and a personal commitment to sharing care.

#### DISCUSSION AND CONCLUSION

This study provides equivocal support for the hypothesis that a father's demand/response capacity is a key factor in determining his responsibility for child care. Data from the National Child Care Survey 1990 indicate that fathers are more likely to care for their children when they work different hours than their wives, but the temporal features of maternal employment are more important than those of paternal employment. Multiple aspects of the mother's employment schedule influence paternal participation in child care for dual-earner couples with a preschool-age child, but only the number of hours a mother works has any effect on fathers' child care for couples whose youngest child is of school age. Moreover, only the particular hours of the day that a father works (day shift versus non-day shift) influences the likelihood of a father being the principal caregiver when his wife is at work. However, this effect is in the opposite direction for those with a preschool-age child compared with those with school-age children only. A father is more likely to be the primary caregiver for a preschool-age child if he works a non-day shift, whereas he is more likely to be the

primary caregiver for a school-age child if he works a day shift. The timing of the school day places different demands on the timing of paternal care, and thus the employment schedule of a father that is conducive to caring for his preschool-age child is at odds with the schedule that facilitates fathers' child care for school-age children.

These findings contribute to our knowledge of the temporal underpinnings of work and family life. First, these findings suggest that the scheduling of employment time has significant repercussions for how individuals organize and coordinate family life. Lifestyles revolve around institutionalized distinctions between weekdays and weekends, and between days and nights. Therefore, certain employment schedules may make family life especially difficult. Fathers and mothers who must work at unconventional times are hard pressed to keep their family life in sync with the social rhythm of society. For example, parents who work late afternoons, evenings, or weekends may be routinely excluded from children's extracurricular activities (e.g., community events typically take place on Saturdays or Sundays). Also, it is nearly impossible to find child care centers or other formal arrangements that operate at night or on the weekend. Thus, parents who are employed at odd hours have fewer choices in how they care for their children.

Second, this study reinforces the idea that time, as a finite, scarce, and valuable resource, is an instrumental facet of the parent role. How women and men allocate time across multiple roles affects how well they juggle and combine the competing responsibilities of employment, relations with their spouse, and parenthood. Particular employment schedules may allow men to commit more time to nurturing activities with their children, thereby enhancing men's experience of the father role. In addition, paternal involvement in childrearing may reduce the role strain/overload or the feelings of inequity of many mothers. Nevertheless, some of the employment schedules that encourage men's responsibility for child care on a short-term basis may be harmful to family life in the long run. For example, the NCCS data show that paternal participation in child care is greater when husbands work at different hours than their wives. Competing schedules, however, may foster marital stress and role conflict: Men may spend more time with their children (parent role), but at the expense of time with their wives (spouse role).

Family and gender scholars would benefit from more research on the temporal structure of fathering and its relationship to men's role identities and the salience of the father role. The focus of the present study was limited to the occurrence of fathers' child care (whether or not it happened) in relation to mother's temporal availability, without regard to social-psychological factors. Future studies should examine other temporal dimensions (see Zerubavel, 1981) of paternal participation in child care: duration of episode (how long fathers' child care lasts for any given occurrence), temporal location (when fathers' child care takes place), rate of occurrence (how often fathers' child care takes place), and sequential structure (order of fathers' child care in relation to other events/activities).

Yet spending time with children is merely one facet of the parent role. The experience of parenthood differs for women and men because of the disparity in the nature of how they spend time with children, that is, the type of care activities. Men may be less likely to be the primary caregivers for infants and young children because the requirements of care may be at odds with the traditional male role (e.g., changing diapers, bathing). Older children, however, require less direct supervision and they are better able to take care of their own bodily needs. Thus, men can take on primary responsibility for the care of older children without feeling less masculine by conventional standards. This contention implies that gender role attitudes may influence the relationship between demand/response capacities and men's rendition of the parent role. Men may respond positively to child care demands only to the extent that their own values and beliefs, as well as those of the general population, embrace caretaking as an essential ingredient of the father (hence male) role. Understanding how ideology interacts with the day-to-day organization and use of time would be invaluable to the study of paternal involvement in child care.

Given the current economic climate, everyone's use of time and the ways of organizing work and family relationships are changing. The rapid expansion of the service sector and the growing reliance on contingent workers mean that more and more parents will move away from the conventional 8-hour, 5-day per week job. This structural transformation complicates the mutual negotiation of work and family roles, and it implies that strategies for juggling multiple roles will have to become more creative. Because

women are more likely to be in the service sector and the contingent labor force, mother's schedules increasingly will become even more uncertain and in flux. Findings from the present study suggest that, independent of role identity and role conflict, men are more likely to find that their new roles include greater caregiving.

## NOTE

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## REFERENCES

- Barnett, R. C., & Baruch, G. K. (1987). Determinants of fathers' participation in family work. *Journal of Marriage and the Family*, 49, 29-40.
- Barnett, R. C., & Baruch, G. K. (1988). Correlates of fathers' participation in family work. In P. Bronstein & C. P. Cowan (Eds.), *Fatherhood today: Men's changing role in the family* (pp. 66-78). New York: John Wiley & Sons.
- Becker, G. S. (1974). A theory of marriage. In T. W. Schultz (Ed.), *Economics of the family* (pp. 229-344). Chicago: University of Chicago Press.
- Berk, R. A., & Berk, S. F. (1978). A simultaneous equation model for the division of household labor. *Sociological Methods and Research*, 6, 431-468.
- Blau, F. D., & Ferber, M. A. (1992). *The economics of women, men, and work* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Brayfield, A. (1992). Employment resources and housework in Canada. *Journal of Marriage and the Family*, 54, 19-30.
- Chodorow, N. (1978). *The reproduction of mothering: Psychoanalysis and the sociology of gender*. Los Angeles: University of California Press.
- Coser, L. (1974). *Greedy institutions*. New York: Free Press.
- Coverman, S. (1985). Explaining husband's participation in domestic labor. *Sociological Quarterly*, 26, 81-97.
- Crosby, F. J. (1991). *Juggling: The unexpected advantages of balancing career and home for women and their families*. New York: Free Press.
- Davis, R. F., & Sanik, M. M. (1991). Fathers' participation in infant care. *Journal of Consumer Studies and Home Economics*, 15, 45-55.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge: Harvard University Press.
- Hertz, R., & Charlton, J. (1989). Making family under a shiftwork schedule: Air Force security guards and their wives. *Social Problems*, 36, 491-507.
- Hochschild, A., with Machung, A. (1989). *The second shift: Working parents and the revolution at home*. New York: Viking.
- Hofferth, S., Brayfield, A., Deich, S., & Holcomb, P. (1991). *The national child care survey, 1990*. Washington, DC: Urban Institute Press.
- Hoffman, L. W. (1983). Increased fathering: Effects on the mother. In M. E. Lamb & A. Sagi (Eds.), *Fatherhood and family policy* (pp. 139-166). Hillsdale, NJ: Lawrence Erlbaum.
- Marsiglio, W. (1993). Paternal engagement activities with minor children. *Journal of Marriage and the Family*, 53, 973-986.
- Mellor, E. F. (1986, November). Shift work and flexitime: How prevalent are they? *Monthly Labor Review*, pp. 14-21.
- Nock, S. L., & Kingston, A. W. (1988). Time with children: The impact of couples' work-time commitments. *Social Forces*, 67, 59-85.
- Pleck, J. H., & Staines, G. L. (1985). Work schedules and family life in two-earner couples. *Journal of Family Issues*, 6, 61-82.
- Presser, H. B. (1986). Shift work among American women and child care. *Journal of Marriage and the Family*, 48, 551-563.
- Presser, H. B. (1988). Shift work and child care among young dual-earner American parents. *Journal of Marriage and the Family*, 50, 133-148.
- Presser, H. B. (1989). Can we make time for children? The economy, work schedules and child care. *Demography*, 26, 523-544.
- Presser, H. B., & Cain, V. S. (1983). Shift work among dual-earner couples with children. *Science*, 219, 876-879.
- Pruett, K. D. (1993). The paternal presence. *Families in Society: The Journal of Contemporary Human Services*, 74, 46-50.
- Ross, C. E. (1987). The division of labor at home. *Social Forces*, 65, 816-833.
- Russell, G., & Radin, N. (1983). Increased paternal participation: The fathers' perspective. In M. E. Lamb & A. Sagi (Eds.), *Fatherhood and family policy* (pp. 139-166). Hillsdale, NJ: Lawrence Erlbaum.
- Simon, B. L. (1990). Impact of shift work on individuals and families. *Families in Society: The Journal of Contemporary Human Services*, 71, 342-348.
- Smith, S. J. (1986, November). The growing diversity of work schedules. *Monthly Labor Review*, pp. 7-13.
- Staines, G. L., & Pleck, J. H. (1983). *The impact of work schedules on the family*. Ann Arbor: University of Michigan, Institute for Social Research.
- Starrels, M. E. (1994). Gender differences in parent-child relations. *Journal of Family Issues*, 15, 148-165.
- U.S. Bureau of the Census. (1992). *Who's minding the kids? Child care arrangements: Fall 1988* (Current Population Reports, Series P-70, No. 20). Washington, DC: U.S. Government Printing Office.
- Zerubavel, E. (1981). *Hidden rhythms: Schedules and calendars in social life*. Chicago: University of Chicago Press.

APPENDIX  
VARIABLES AND MEASUREMENT

| Variables                | Measurement   |
|--------------------------|---|
| Father care              |   |
| Any time                 | 1 if father care at all on a regular basis, 0 otherwise             |
| When mother works        | 1 if father care for portion of time when mother works, 0 otherwise |
| Primary caregiver        | 1 if father is primary caregiver when mother works, 0 otherwise     |
| Mother's schedule        |   |
| Hours per week           | Number of paid hours employed last week <sup>a</sup>                |
| Rotating schedule        | 1 if rotating schedule, 0 if fixed schedule                         |
| Weekends                 | 1 if works Saturday and/or Sunday last week, 0 otherwise            |
| Non-day shift            | 1 if works <50% weekly hours between 8 am-4 pm, 0 otherwise         |
| Father's schedule        |   |
| Hours per week           | Number of paid hours employed last week <sup>a</sup>                |
| Rotating schedule        | 1 if rotating schedule, 0 if fixed schedule                         |
| Weekends                 | 1 if works Saturday and/or Sunday last week, 0 otherwise            |
| Non-day shift            | 1 if works <50% weekly hours between 8 am-4 pm, 0 otherwise         |
| Couple's schedule        |   |
| Nonoverlapping hours     | Number of hours per week father not at job when mother works        |
| Control variables        |   |
| Age of youngest child    | Years of age  |
| Number of siblings       | None (omitted), 1 sibling, 2 or more siblings                       |
| Race                     | White (omitted), Black, Hispanic                                    |
| Mother's age             | Years of age  |
| Mother's education       | Number of years completed   |
| Mother's annual earnings | Natural log of mother's gross annual earnings <sup>b</sup>          |
| Father's annual earnings | Natural log of father's gross annual earnings <sup>b</sup>          |

<sup>a</sup>About 4% of mothers and 8% of fathers had missing hours. For these cases, I substituted the overall sample mean. I controlled for missing data with two dummy variables: 1 for missing on mother's hours, 0 otherwise, and 1 for missing on father's hours, 0 otherwise.

<sup>b</sup>About 16% of mothers and 23% of fathers had missing earnings. I imputed earnings for these cases by regressing mother's (father's) earnings on race, mother's (father's) education, mother's (father's) age, age of youngest child, and number of siblings. I controlled for missing data with two dummy variables: 1 for missing mother's earnings, 0 otherwise, and 1 for missing father's earnings, 0 otherwise.